



amdt#B

SEQUENCE LISTING

<110> Khan, Nisar A.
Benner, Robert

<120> Gene regulator

<130> 2183-5223US

<140> 10/028,075

<141> 2001-12-21

<150> EP 01203748.7

<151> 2001-10-04

<160> 175

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<210> 32
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Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu
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Ser Cys Gln Cys Ala Leu
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Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys
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<210> 37
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Glu Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly
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<210> 38
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Cys

<210> 45
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Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly Tyr
20 25 30

Cys Pro Thr
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<210> 46
<211> 21
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signalling molecule

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His Pro Leu Thr Cys
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<210> 47
<211> 18
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<220>
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signalling molecule

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Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
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Thr Cys

<210> 48
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 signalling molecule

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Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
 20 25 30

Pro Ile Leu Pro Gln
 35

<210> 49
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 signalling molecule

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<210> 50
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 <210> 52
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 <210> 54
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 <210> 55

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<210> 69
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<210> 75
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 <210> 77
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 <210> 78
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 <210> 82
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pdb/1GJS/1GJS-A

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<210> 84
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<210> 85
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pdb/1GBR/1GBR-B

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<210> 86
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Met Leu Pro Ala Val Pro

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<210> 88

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<212> PRT

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<223> Description of Artificial Sequence: pdb/1JLI/1JLI

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<210> 89

<211> 4

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<210> 90

<211> 5

<212> PRT

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<223> Description of Artificial Sequence:
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<210> 91
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pdb/1PRX/1PRX-A

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pdb/1PRX/1PRX-A

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<210> 93
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<210> 94
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pdb/1GER/1GER-A

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1 5

<210> 96
<211> 5
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Cys

<210> 98
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5

10

15

Cys

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5

10

15

<210> 101

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Lys Val Ile Gln Gly Ser Leu Asp Ser Leu Pro Gln Ala Val

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Leu Val Gln Lys Val Val Pro Met Leu Pro Arg Leu Leu Cys
1 5 10

<210> 109
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Mm.129320.2

<400> 109
Leu Pro Arg Leu
1

<210> 110
<211> 4
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.129320.2

<400> 110

Pro Met Leu Pro

1

<210> 111

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.22430.1

<400> 111

Pro Ser Ala Pro Gln

1

5

<210> 112

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: P20155

<400> 112

Leu Pro Gly Cys Pro Arg His Phe Asn Pro Val

1

5

10

<210> 113

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Rn.2337.1

<400> 113

Leu Val Gly Cys Pro Arg Asp Tyr Asp Pro Val

1

5

10

<210> 114

<211> 4

<212> PRT

<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Rn.2337.1

 <400> 114
 Leu Val Gly Cys
 1

 <210> 115
 <211> 6
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Hs.297775.1

 <400> 115
 Pro Gly Cys Pro Arg Gly
 1 5

 <210> 116
 <211> 5
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Mm.1359.1

 <400> 116
 Leu Pro Gly Cys Pro
 1 5

 <210> 117
 <211> 6
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/O56177/O56177

 <400> 117
 Val Leu Pro Ala Ala Pro
 1 5

 <210> 118
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
sptrembl/Q9W234/Q9W234

<400> 118
Leu Ala Gly Thr Ile Pro Ala Thr Pro
1 5

<210> 119
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
sptrembl/Q9W234/Q9W234

<400> 119
Pro Ala Thr Pro
1

<210> 120
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
sptrembl/Q9IYZ3/Q9IYZ3

<400> 120
Gly Leu Leu Pro Cys Leu Pro
1 5

<210> 121
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
sptrembl/Q9PVW5/Q9PVW5

<400> 121
Pro Gly Ala Pro
1

<210> 122
<211> 10

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9PVW5/Q9PVW5

 <400> 122
 Leu Pro Gln Arg Pro Arg Gly Pro Asn Pro
 1 5 10

 <210> 123
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9PVW5/Q9PVW5

 <400> 123
 Pro Arg Gly Pro
 1

 <210> 124
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Hs.303116.2

 <400> 124
 Gly Cys Pro Arg
 1

 <210> 125
 <211> 6
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1DU3/1DU3-A

 <400> 125
 Gly Cys Pro Arg Gly Met
 1 5

 <210> 126
 <211> 4

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: pdb/1BIO/1BIO

 <400> 126
 Leu Gln His Val
 1

 <210> 127
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1FL7/1FL7-B

 <400> 127
 Val Pro Gly Cys
 1

 <210> 128
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 pdb/1HR6/1HR6-A

 <400> 128
 Cys Pro Arg Gly
 1

 <210> 129
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: pdb/1H6/1HR6-A

 <400> 129
 Leu Lys Gly Cys
 1

 <210> 130
 <211> 4
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 130

Pro Pro Gly Pro

1

<210> 131

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 131

Leu Pro Gly Cys Pro Arg Glu Val

1

5

<210> 132

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 132

Cys Pro Arg Glu

1

<210> 133

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P01229/LSHB HUMAN

<400> 133

Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Leu Pro Gln Val Val

1

5

10

15

Cys

<210> 134

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P01229/LSHB HUMAN

<400> 134

Met Met Arg Val
1

<210> 135

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P01229/LSHB HUMAN

<400> 135

Val Leu Pro Pro Leu Pro
1 5

<210> 136

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P01229/LSHB HUMAN

<400> 136

Val Leu Pro Pro Leu Pro Gln
1 5

<210> 137

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P01229/LSHB HUMAN

<400> 137

Ala Val Leu Pro Pro Leu Pro
1 5

<210> 138

<211> 8

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
 swissnew/P01229/LSHB HUMAN

<400> 138
Ala Val Leu Pro Pro Leu Pro Gln
 1 5

<210> 139
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
 swissnew/P07434/CGHB PAPAN

<400> 139
Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Val Pro Gln Val Val
 1 5 10 15

Cys

<210> 140
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
 swissnew/P07434/CGHB PAPAN

<400> 140
Leu Gln Ala Gly
 1

<210> 141
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
 swissnew/P07434/CGHB PAPAN

<400> 141

Val Leu Pro Pro Val Pro
1 5

<210> 142
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 142
Val Leu Pro Pro Val Pro Gln
1 5

<210> 143
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 143
Ala Val Leu Pro Pro Val Pro
1 5

<210> 144
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 144
Ala Val Leu Pro Pro Val Pro Gln
1 5

<210> 145
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/Q28376/TSHB HORSE

<400> 145
Met Thr Arg Asp
1

<210> 146
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/Q28376/TSHB HORSE

<400> 146
Gln Asp Val Cys
1

<210> 147
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/Q28376/TSHB HORSE

<400> 147
Ile Pro Gly Cys
1

<210> 148
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
sptrembl/Q9Z284/Q9Z284

<400> 148
Pro Ala Leu Pro Ser
1 5

<210> 149
<211> 6
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/Q9UCG8/Q9UCG8

<400> 149
Leu Pro Gly Gly Pro Arg
1 5

<210> 150
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
sptrembl/Q9UCG8/Q9UCG8

<400> 150
Leu Pro Gly Gly
1

<210> 151
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
sptrembl/Q9UCG8/Q9UCG8

<400> 151
Gly Gly Pro Arg
1

<210> 152
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: XP_028754

<400> 152
Leu Gln Arg Gly
1

<210> 153
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: XP_028754

 <400> 153
 Leu Gln Arg Gly Val
 1 5

 <210> 154
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: XP_028754

 <400> 154
 Leu Gly Gln Leu
 1

 <210> 155
 <211> 13
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: SignalP (CBS)

 <400> 155
 Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro
 1 5 10

 <210> 156
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: HLA molecule
 type I (A_0201)

 <400> 156
 Val Leu Gln Gly Val Leu Pro Ala Leu
 1 5

 <210> 157
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>

<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 157
Gly Val Leu Pro Ala Leu Pro Gln Val
1 5

<210> 158
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 158
Val Leu Pro Ala Leu Pro Gln Val Val
1 5

<210> 159
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 159
Arg Leu Pro Gly Cys Pro Arg Gly Val
1 5

<210> 160
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 160
Thr Met Thr Arg Val Leu Gln Gly Val
1 5

<210> 161
<211> 15

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: MHC II (H2-Ak
 15-mers)

 <400> 161
 Cys Pro Thr Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu
 1 5 10 15

 <210> 162
 <211> 15
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: MHC II (H2-Ak
 15-mers)

 <400> 162
 Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val
 1 5 10 15

 <210> 163
 <211> 15
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: HLA-DRB1*0101
 15-mers

 <400> 163
 Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser
 1 5 10 15

 <210> 164
 <211> 15
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: HLA-DRB1*0101
 15-mers

 <400> 164
 Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val
 1 5 10 15

<210> 165
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0101
15-mers

<400> 165
Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr
1 5 10 15

<210> 166
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0301
(DR17) 15-mers

<400> 166
Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val
1 5 10 15

<210> 167
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0301
(DR17) 15-mers

<400> 167
Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val
1 5 10 15

<210> 168
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-56
peptide

<400> 168

Val Ala Pro Ala Leu Pro Gln
1 5

<210> 169

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPF-62
peptide

<400> 169

Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu Pro
1 5 10 15

Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu
20 25 30

Ser Cys Gln
35

<210> 170

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPF-67
peptide

<400> 170

Cys Pro Arg Gly Val Asn Pro
1 5

<210> 171

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPF-70
peptide

<400> 171

Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln
1 5 10

<210> 172

<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-75
peptide

<400> 172
Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly
1 5 10 15

Pro Cys

<210> 173
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-56
peptide

<400> 173
Val Ala Pro Ala Leu Pro Gln
1 5

<210> 174
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-71
peptide

<400> 174
Met Thr Arg Val Leu Pro Gly Val Leu Pro Ala Leu Pro Gln Val Val
1 5 10 15

Cys

<210> 175
<211> 9
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: NMPF peptide

<400> 175

Cys Arg Gly Val Asn Pro Val Val Ser
1 5

B2
come